

CLAIMS

WHAT IS CLAIMED IS:

1. A water temperature selection and control module for a washing machine comprising:

a processor;

a selector operative to allow a user to select a water temperature setting for the washing machine;

selector circuitry/logic in communication with said selector and said processor, said selector circuitry/logic operative to provide a signal representing the selected water temperature setting; and

said processor is operative to receive said selected water temperature setting signal and produce a control signal in response thereto, said control signal operative to control water flow into the washing machine.

2. The module of claim 1, wherein said processor and said selector are provided on a single board.

3. The module of claim 1, wherein said processor is further operative to receive a washing machine sensor signal and produce said control signal in response to the selected water temperature setting signal and the washing machine sensor signal.

4. The module of claim 3, wherein said washing machine sensor signal comprises one of a water level sensor signal and a water temperature sensor signal.

5. The module of claim 3, wherein said washing machine sensor signal comprises a water level signal from a water level sensor and a water temperature signal from a water temperature sensor.

6. The module of claim 1, wherein said selector comprises a knob and knob assembly.

7. The module of claim 6, wherein said selector is operative to provide a plurality of selectable water temperature settings.

8. The module of claim 1, wherein said selector comprises a potentiometer and said water temperature setting signal comprises a variable resistance signal.

9. The module of claim 1, wherein said control signal is operative to control water flow via a valve actuation signal.

10. The module of claim 9, wherein said valve actuation signal comprises a solenoid actuation signal.

11. In a washing machine, a method of solid state water temperature selection and control comprising the steps of:
receiving a water temperature setting signal from a water temperature selector of the washing machine;
processing the received water temperature setting signal;
producing a control signal in response to the received water temperature setting signal; and
providing the control signal to a water valve of the washing machine.

12. The method of claim 11, further comprising the step of:

receiving a washing machine sensor signal from a washing machine sensor; and

wherein the step of producing a control signal in response to the received water temperature setting signal further includes producing the control signal in response to the received water temperature setting signal and the washing machine sensor signal.

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13. The method of claim 12, wherein the step of receiving a washing machine sensor signal from a washing machine sensor comprises receiving a washing machine sensor signal comprising one of a water level signal and a water temperature signal respectively from a water level sensor and a water temperature sensor.

14. The method of claim 11, wherein the step of receiving a water temperature setting signal from a water temperature selector of the washing machine comprises receiving a water temperature setting signal from a water temperature selector comprising a knob and knob assembly.

15. The method of claim 14, wherein the step of receiving a water temperature setting signal from a water temperature selector comprising a knob and knob assembly includes receiving a water temperature setting signal from a water temperature selector comprising a knob and knob assembly that provides a plurality of selectable water temperature settings.

16. The method of claim 11, wherein the step of receiving a water temperature setting signal from a water temperature selector comprising a knob and knob assembly includes receiving a water temperature setting signal comprising a variable resistance signal from a potentiometer.

17. The method of claim 11, wherein the step of providing the control signal to a water valve of the washing machine comprises providing the control signal to solenoid.

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18. A solid state water temperature selection and control module for a washing machine comprising:

a circuit board;

a processor mounted to said circuit board;

a selector mounted to said circuit board and operative to allow a user to select a water temperature setting for the washing machine; and

selector circuitry in communication with said selector and said processor, said selector circuitry operative to provide a signal representing the selected water temperature setting;

said processor operative to receive said selected water temperature setting signal and produce a control signal in response thereto, said control signal operative to control water flow into the washing machine.

19. The module of claim 18, wherein said processor is further operative to receive a washing machine sensor signal and produce said control signal in response to the selected water temperature setting signal and the washing machine sensor signal.

20. The module of claim 19, wherein said washing machine sensor signal comprises one of a water level sensor signal and a water temperature sensor signal.

21. The module of claim 19, wherein said washing machine sensor signal comprises one of a water level signal from a water level sensor and a water temperature signal from a water temperature sensor.

22. The module of claim 18, wherein said selector comprises a knob and knob assembly.

23. The module of claim 22, wherein said selector is operative to provide a plurality of selectable water temperature settings.

24. The module of claim 18, wherein said selector comprises a potentiometer and said water temperature setting signal comprises a variable resistance signal.

25. The module of claim 18, wherein said control signal is operative to control water flow via a valve actuation signal.

26. The module of claim 25, wherein said valve actuation signal comprises a solenoid actuation signal.

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